

Amendments to the Specification:

Please replace the paragraph beginning at page 7, line 20, with the following amended paragraph:

An arrangement of fourth embodiment of the present invention is characterized in that in a semiconductor device having a silicon film having a crystallinity, the silicon film contains a metal element which promotes crystallization of silicon in concentration of $1 \times 10^{16} \text{ cm}^{-3}$ to $5 \times [10^{19}] \text{ } 10^{18} \text{ cm}^{-3}$, fluorine atoms in concentration of $1 \times 10^{15} \text{ cm}^{-3}$ to $1 \times 10^{20} \text{ cm}^{-3}$, and hydrogen atoms in concentration of $1 \times 10^{17} \text{ cm}^{-3}$ to $1 \times 10^{21} \text{ cm}^{-3}$.

Please replace the paragraph bridging pages 8 and 9 with the following amended paragraph:

According to a preferred mode for carrying out the invention disclosed in the present specification, an amorphous silicon film is formed on a glass substrate at first. Then, the amorphous silicon film is crystallized by an action of metal element typified by nickel which promotes crystallization of silicon to obtain a crystal silicon film. {0041}

Please replace the paragraph beginning at page 10, line 12, with the following amended paragraph:

A fabrication process of the present embodiment will be explained by using FIG. 1 below. At first, a silicon oxide film or a silicon oxide nitride film 102 is formed as an underlying film in a thickness of 3000 angstrom on the glass substrate 101 of ~~Corning~~ Corning 1737 (distortion point: 667° C).

Please replace the paragraphs beginning at page 13, line 13, with the following amended paragraphs:

Next, a heat treatment is implemented in the temperature range from 500° C to 700° C in the state shown in FIG. 1B to crystallize the amorphous silicon film 103 and to obtain a crystal silicon film 105. This heat treatment is implemented in a nitrogen atmosphere containing 3% of hydrogen at 640° C for four hours.

It is preferable to implement the heat treatment below the temperature of the distortion point of the glass substrate. Because the distortion point of the ~~Corning~~ Corning 1737 glass substrate is 667° C, the upper limit of the heating temperature here is preferable to be about 650° C, leaving some margin.

Please replace the paragraph beginning at page 15, line 9, with the following amended paragraph:

Here, this heat treatment is implemented with an oxygen atmosphere containing 3% of hydrogen and 100 ppm of ~~[[CLF3]]~~ ClF₃ at 640° C. In this step, the thermal oxide film is formed in a thickness of 200 angstrom (FIG. 1D).

Please replace the paragraph beginning at page 16, line 11, with the following amended paragraph:

The crystal silicon film thus formed contains the metal element which promotes crystallization of silicon in concentration of $1 \times 10^{16} \text{ cm}^{-3}$ to $5 \times \text{[[10}^{19}\text{]]}$ 10^{18} cm^{-3} , fluorine atoms in concentration of $1 \times 10^{15} \text{ cm}^{-3}$ to $1 \times 10^{20} \text{ cm}^{-3}$, and hydrogen atoms in concentration of $1 \times 10^{17} \text{ cm}^{-3}$ to $1 \times 10^{21} \text{ cm}^{-3}$.

Please replace the paragraphs beginning at page 17, line 17, with the following amended paragraphs:

The present embodiment relates to a case of growing crystal in the form different from that in the first embodiment. That is, the present embodiment relates to a method of growing the crystal in a direction parallel to the substrate, i.e. a method called lateral growth, by utilizing the metal element which promotes crystallization of silicon. ~~{0096}~~

FIG. 2 shows the fabrication process according to the present embodiment. At first, a silicon oxide film or a silicon oxide nitride film is formed as an underlying film 202 in a thickness of 3000 angstrom on the ~~Gening~~ Corning 1737 glass substrate (or a quartz substrate) 201.

Please replace the paragraph beginning at page 18, line 11, with the following amended paragraph:

The opening 205 has a thin and long rectangular shape in the longitudinal direction from the depth to the front side of the figure. Preferably, the width of the opening 203 is 20 ~~[[オム]]~~ μm or more. The length thereof in the longitudinal direction may be determined arbitrarily.

Please replace the paragraph beginning at page 19, line 6, with the following amended paragraph:

It is possible to advance this lateral growth across more than 100 ~~[[オム]]~~ μm under the conditions shown in the present embodiment. Then, a silicon film 208 having the domain in which the crystal has thus grown laterally is obtained. It is noted that crystal growth in the vertical direction called vertical growth advances from the surface

of the silicon film to the underlying interface in the domain where the opening 205 is formed.

Please replace the paragraph beginning at page 24, line 18, with the following amended paragraph:

The anodic oxide film may be grown up to several $[[\text{オム}]] \mu\text{m}$ thick. The thickness is 6000 angstrom here. It is noted that the range of the growth may be controlled by adjusting an anodizing time.

Please replace the paragraph beginning at page 27, line 10, with the following amended paragraph:

The silicon oxide ~~nitride~~ film 404 composes the gate insulating film together with the thermal oxide film 400.

Please replace the paragraph beginning at page 27, line 14, with the following amended paragraph:

After forming the aluminum film, a dense anodic oxide film not shown is formed. The anodic oxide film is formed by using ethylene glycol solution containing 3% of tartaric acid as electrolyte.

[0159]

Please replace the paragraph beginning at page 28, line 11, with the following amended paragraph:

The anodic oxide film may be grown up to several ~~[[オム]]~~ μm thick. The thickness is 6000 angstrom here. It is noted that the range of the growth may be controlled by adjusting an anodizing time.

Please replace the paragraph bridging pages 29 and 30 with the following amended paragraph:

Next, a silicon oxide film or a silicon nitride film or their laminated film is formed as an interlayer insulating film ~~[[414]]~~ 415. The interlayer insulating film may be constructed by forming a layer made from a resin material on the silicon oxide film or the silicon nitride film.

Please replace the paragraph beginning at page 33, line 7, with the following amended paragraph:

Further, an interlayer insulating film 524 made of a resin material is formed by means of spin coating. Here, the thickness of the interlayer insulating film 524 is 1 ~~[[オム]]~~ μm (FIG. 5E).

Please replace the paragraph beginning at page 35, line 6, with the following amended paragraph:

Next, a gate electrode ~~[[608]]~~ 603 is formed by using an adequate metallic material or metallic silicide silicide material (FIG. 6A).